

Bureau of Alcohol, Tobacco and Firearms, Treasury

§21.118

§21.109 Gasoline, unleaded.

Conforms to specifications as established by the American Society for Testing and Materials (ASTM) in the 1980 Annual Book of ASTM Standards, Part 23, page 229, Standard No. D 439-79. Any of the "seasonal and geographical" volatility classes for unleaded gasoline are considered suitable as a denaturant. (For incorporation by reference, see §21.6(b).)

§21.110 Gentian violet.

(a) Gentian violet (methyl violet, methylrosaniline chloride) occurs as a dark green powder or crystals having metallic luster.

(b) *Arsenic content.* Not more than 15 ppm. (as As_2O_3) as determined by the applicable U.S.P. method.

(c) *Identification test.* Sprinkle about 1 mg of sample on 1 ml of sulfuric acid; it dissolves in the acid with an orange or brown-red color. When this solution is diluted cautiously with water, the color changes to brown, then to green, and finally to blue.

(d) *Insoluble matter.* Not to exceed 0.25 percent when tested by the following method:

Transfer 1.0 gram of sample to a 150 ml beaker containing 50 ml of alcohol. Stir to complete solution and filter through a weighed Whatman No. 4 filter paper. Wash residue with small amounts of alcohol totaling about 50 ml. Dry paper in oven for 30 minutes at 80 °C. and weigh. Calculate insoluble material.

§21.111 Heptane.

(a) *Distillation range.* No distillate should come over below 200 °F. and none above 211 °F.

(b) *Odor.* Characteristic odor.

§21.112 Isopropyl alcohol.

Specific gravity at 15.56 °/15.56 °C. 0.810 maximum.

§21.113 Kerosene.

(a) *Distillation range.* (For applicable ASTM method, see 1980 Annual Book of ASTM Standards, Part 25, page 395, Standard No. D 3699-78 for burner fuel; see Part 23, page 849, Standard Nos. D 1655-80a for aviation turbine fuels and D 86-78 for distillation of petroleum

products; for incorporation by reference, see §21.6(b).) No distillate should come over below 340 °F. and none above 570 °F.

(b) *Flash point.* 115 °F. minimum.

(c) *Odor.* Characteristic odor.

§21.114 Kerosene (deodorized).

(a) *Distillation range.* No distillate should come over below 340 °F. and none above 570 °F.

(b) *Flash point.* 155 °F. minimum.

§21.115 Methyl alcohol.

Specific gravity at 15.56 °/15.56 °C. 0.810 maximum.

§21.116 Methyl isobutyl ketone.

(a) *Acidity (as acetic acid).* 0.02 percent by weight, maximum.

(b) *Color.* Colorless.

(c) *Distillation range.* (For applicable ASTM method, see 1980 Annual Book of ASTM Standards, Part 29, page 147, Standard No. D 1153-77; for incorporation by reference, see §21.6(b).) No distillate should come over below 111 °C. and none above 117 °C.

(d) *Odor.* Characteristic odor.

(e) *Specific gravity at 20 °/20 °C.* 0.799 to 0.804.

§21.117 Methyl n-butyl ketone.

(a) *Acidity (as acetic acid).* 0.02 percent by weight, maximum.

(b) *Color.* Colorless.

(c) *Odor.* Characteristic odor.

(d) *Refractive index at 20 °C.* 1.396 to 1.404.

(e) *Specific gravity at 20 °/20 °C.* 0.800 to 0.835.

(f) *Distillation range.* No distillate should come over below 123 °C. and none above 129 °C.

§21.118 Nicotine solution.

(a) *Composition.* Five gallons of an aqueous solution containing 40 percent nicotine; 3.6 avoirdupois ounces of methylene blue, U.S.P.; water sufficient to make 100 gallons.

(b) *Color.* One ml of the nicotine solution (previously agitated in the presence of air) is measured into 100 ml of water and thoroughly mixed. Fifty ml of this colored solution is compared, using Nessler tubes, with 50 ml of a standard color solution containing 5 grams of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$, C.P. in 100 ml of